

A COMPUTER MONITOR UTILITY ASSEMBLY

BACKGROUND OF THE INVENTIONClaim of Priority

The present application is a Continuation-In-Part to an earlier filed United States patent application having Serial No. 09/504,355 which was filed on February 16, 2000, which is a Continuation to United States patent application having Serial No. 09/103,194 which was filed on June 23, 1998, which matured into U.S. Patent No. 6,024,337 on February 15, 2000, which is a Continuation-In-Part of U.S. patent application Serial No. 08/642,928 which was filed on May 9, 1996, which matured on June 23, 1998 as U.S. Patent No. 5,769,378.

Field of the Invention

The present invention relates to a computer monitor utility assembly structured to mounted in association with a computer monitor in order to effectively shield the computer screen from glare, thereby reducing user eyestrain and fatigue and improving display readability, provide a convenient additional work or storage space without occupying substantially more space than the monitor itself, increasing user privacy, and conveniently, selectively and compactly orienting and concealing commonly required multi-media user accessories, in a single, adjustable, modular, and convenient to utilize and implement assembly.

1 DESCRIPTION OF THE RELATED ART

2 The use of computers in a variety of applications such as
3 word processing, accounting, desk-top publishing, computer-aided
4 drafting, engineering, programming, and spreadsheets, is now
5 widespread. These applications demand continued use of the
6 computer for more hours than ever before and have raised
7 concerns about user fatigue, eye strain, headaches, neck/back
8 muscle tension, and other related undesirable health effects.
9 As computer usage in the workplace has increases due to advances
10 such as electronic mail, computer ordering/billing, internet
11 advertising, computer faxing, and on-line services, reducing an
12 employee's computer-related fatigue plays an increasingly vital
13 role in enhancing productivity.

14 A primary source of user eye strain and fatigue relating to
15 a computer monitor screen display results from excessive screen
16 brightness and glare from external light striking the monitor
17 screen. Typically, these lights come from overhead sources and
18 are not independently adjustable. To help overcome the effects
19 of light striking the monitor surface, many users increase the
20 brightness and/or contrast settings on their monitor. Such
21 techniques are generally not favorable, however, because in
22 addition to dramatically increasing the strain and fatigue on
23 the user's eyes, the computer monitor may be damaged by image
24 burn-in, a common form of display damage. Moreover, decreasing
25 the surrounding room lighting is often not possible due to the

1 presence of other workers, and is generally not beneficial as a
2 computer user must still be able to look to and see other items
3 and documents near the computer. As such, it would be
4 beneficial to provide a comprehensive system that is capable of
5 selectively shading the computer monitor screen from excessive
6 light and glare so that the user will be able to naturally
7 reduce the brightness and contrast settings on his monitor and
8 thus extend the monitors useful life while also reducing the
9 strain on his/her eyes. Furthermore, such a system should not
10 be independently glare producing or glare susceptible, such as
11 some vertical screen filters presently available which are
12 designed to limit the effects of monitor radiation. Rather, a
13 system which permits necessary lighting to be available for all
14 required tasks, but still eliminates the glare which
15 necessitates manual screen adjustment and compensation is
16 preferred.

17 An additional consideration often involved in computer use
18 relates to those computer applications wherein the user is
19 entering or viewing sensitive or confidential information. In
20 the workplace, restricted information may consist of something
21 as simple as preparing payroll checks. The close proximity of
22 computer users in the workplace creates an enhanced demand for
23 privacy when the user is dealing with restricted or confidential
24 information. Typically a computer monitor screen offers no
25 privacy to a user from other users sitting at adjacent

1 computers. Consequently, another user or bystander is able to
2 view the monitor screen from either side of the primary user.
3 There is therefore a need in today's computer environment to
4 provide an assembly which can easily and un-obtrusively maximize
5 a user's privacy. Moreover, such a system should be capable of
6 effectively operating with a variety of different size and
7 configuration monitors.

8 Indeed, a natural reason behind the general lack of privacy
9 between computer work stations generally relates to the amount
10 of space that is often taken up by a computer system, and in
11 particular a computer monitor on a worker's desk. In such
12 environments wherein a plurality of work stations are arranged
13 in close proximity with one another, or even in private offices
14 or cubicles, the need for space in proximity to the computer is
15 ever increasing. Moreover, as computers become more central to
16 the work to be performed, users have a greater need for
17 maintaining necessary items and storage in its vicinity for
18 convenient access. As a result, another inconvenience
19 associated with computer use relates to the increased demand for
20 storage space which is either taken up by the computer and its
21 peripheral devices, and/or which relates to usage of the
22 computer itself. Today, computers can be adapted to include
23 several optional peripherals such as a microphone, speakers,
24 mouse, digitizer pen, scanner, etc., and it is more important
25 than ever to utilize space efficiently so as to maximize usable

1 desk space and reduce clutter. As such there is a need for an
2 assembly which maximizes the space usage of the computer and
3 minimizes peripheral space that is taken up as a result of the
4 computer and/or its accessories. Furthermore, such a space
5 maximizing and/or storage providing structure should operate in
6 conjunction with and should not compromise the glare minimizing
7 structure of the system.

8 Looking further to the variety of peripheral items which
9 are becoming more readily used by computer systems, the general
10 nature of these devices often lead to space reduction, clutter
11 and/or wire entanglement as they are routinely added to a
12 system. In particular, most peripheral items are often added to
13 a system gradually, as the user need arises. Because these
14 devices must necessarily be disposed in association with the
15 computer work area and the monitor, typically these devices are
16 placed on or around the computer in an overlapping and un-
17 organized manner. furthermore, other items, such as a mouse,
18 keyboard, charts, papers, telephone, etc. are often displaced
19 into less convenient locations because of the need to have the
20 speakers, camera, microphone, etc. in close proximity to the
21 monitor. As a result, there is a need for a system which in
22 addition to other beneficial characteristics, is also capable of
23 operatively orienting a variety of peripheral items in an
24 accessible, yet organized, neat, and efficient manner.
25 Furthermore, such a system should be capable of expanding with

1 the system, accepting add on peripheral devices and integrating
2 them into the organized array of the existing devices.

3 It is also noted that a majority of computer applications
4 require a user to constantly refer to a document while typing.
5 For example, word-processing, computer-aided drafting, and
6 accounting applications require the user to refer to letters,
7 drawings, spreadsheets, or like documents while typing.
8 Typically the document is placed on a separate document stand
9 placed near the computer, or flat on the user's desk and he/she
10 must keep adjusting their line of sight between the computer
11 monitor screen and the document. Furthermore, a flat document
12 cannot be adjustably positioned to avoid excessive light and
13 glare. In addition to being very inefficient and adding to the
14 clutter in a work area, this practice significantly increases
15 user fatigue due to neck, shoulder, or back muscle tension as
16 well as eye strain and related irritation. As to separate
17 document stands, they are sometimes difficult to utilize or
18 effectively position, especially in circumstances where a user
19 has limited work space around their computer on which to place
20 and maneuver such a stand into acceptable alignment, especially
21 since such free standing devices must necessarily take up some
22 space in the work area.

23 In addition to use of a computer at a work place, computers
24 are more and more frequently being utilized as sales aides, such
25 as at a trade show. The computers uses in such a circumstance

1 can range from illustrating new software or hardware
2 capabilities, to demonstrating products and variations of a
3 manufacturer which may or may not have anything to do with
4 computers. One principal difficulty associated with utilizing
5 a computer in those circumstances relates to the limited space
6 available. For example, space at a trade show can be quite
7 expensive and quite limited for each individual vendor. As a
8 result, space considerations may sometimes take precedent over
9 the desirability of utilizing a computer display. If, however,
10 a system was provide which could maximize the space taken up by
11 the computer monitor/display, it would greatly expand the
12 effectiveness of the presentation by permitting the use of an
13 adequate sized computer display without compromising any other
14 sales considerations such as the use of printed charts and
15 photos, and the convenient distribution of product literature.

16 Others in the past have attempted to provide items which
17 may address some of the problems associated with computer use.
18 For example, there are a variety of glare-guarding screen covers
19 that are placed in front of the screen to minimize some glare
20 and/or guard against screen radiation. Such devices, however,
21 may ultimately make viewing more difficult, can diminish the
22 clarity of an image, and cannot be used with touch screen
23 applications. Furthermore, and as previously mentioned, because
24 of the often intense nature of overhead lighting, such existing
25 devices often provide a new source off of which the glare can

1 reflect and affect the user's vision. Indeed, while other
2 devices generally achieve some glare protection, there is still
3 a need for a device that specifically addresses the problems of
4 overhead glare and does so in a space saving and multi-purpose
5 fashion such that the need to reduce glare does not compromise
6 other necessities associated with the computer work station.
7 Also, various external and mounted page holders exist in the
8 secretarial field. Such conventional external page holders can
9 take up much space directly on the work area, rarely position
10 the document in a convenient accessible location next to the
11 monitor due to space and size limitations, and generally remain
12 in the way if not being used. Moreover, mounted page holders are
13 usually either very large and obtrusive, or are substantially
14 flimsy so as to not be able to effectively hold multiple
15 documents in a convenient location. Indeed, such normal page
16 holders typically only hold the documents being worked on and do
17 not address the needs of a user as to incoming or outgoing
18 documents. Typically a user is left with no other choice than
19 to take up further space with an "IN" basket or like structure,
20 or they may merely position stacks of papers in any free area,
21 thereby still leaving the need for convenient and stable
22 storage. Generally, no utility item presently available
23 addresses all of the computer user's needs in a single, solid,
24 integrated and effective design that is capable of expanding to
25 suit the needs of the user and/or the type of monitor on which

1 it will be employed.

2 Accordingly, there is a need in the art for a computer
3 monitor utility assembly which can significantly reduce
4 eyestrain and fatigue, can increase the available workspace in
5 the vicinity of the computer monitor, can effectively position
6 a document in a readable orientation, can provide an effective
7 trade show display, can increase user screen privacy, and can
8 reduce computer peripheral and cable clutter, all in a single,
9 expandable, well organized assembly.

10
11 SUMMARY OF THE INVENTION

12 The present invention is directed towards an improved
13 computer monitor utility assembly to be used with a computer
14 monitor so as to provide additional work or storage space,
15 convenient positioning of documents, increased user privacy,
16 reduced user eyestrain and fatigue caused by screen glare, and
17 improved display readability, in a single multi-purpose
18 assembly.

19 The improved computer monitor utility assembly includes a
20 universal mount base. The universal mount base is structured
21 and disposed to be securely, yet preferably removably attached
22 to the top surface of the monitor. Operatively coupled with the
23 universal mount base is a generally rigid top panel. The top
24 panel is structured to have a width generally equivalent to a
25 width of a screen of the monitor.

1 The present invention further includes an upper mount
2 assembly. Specifically, the upper mount assembly is structured
3 to adjustably secure the top panel to the universal mount base,
4 and accordingly the monitor, such that the top panel is
5 maintained in generally overlying relation with the monitor.
6 Moreover, the upper mount assembly preferably overhangs the top
7 panel beyond the front surface of the monitor. As a result, the
8 top panel preferably provides shielding and shading to the
9 screen of the monitor, such as from overhead lighting, so as to
10 minimize glare evidenced to a user.

11 The upper mount assembly is preferably substantially secure
12 and functions to maintain the top panel in a secure relation
13 wherein it is capable of supporting a number of items thereon.
14 Along these lines, the top panel preferably includes a lip
15 disposed at least on a front end thereof. This lip functions to
16 maintain items, such as papers, disposed on the top panel
17 securely retained, especially if the top panel has a tilted or
18 angled orientation. In particular, the top panel is preferably
19 structured to achieve forward and backward slided movement
20 relative to the mount base. As such, the top panel can
21 selectively overhang beyond the front surface of the monitor in
22 order to selectively shade a screen on the front surface of the
23 monitor from light and glare to an extent desired by a user.

24 Further included with the improved computer monitor utility
25 assembly of the present invention are a pair of generally rigid

1 side panels. The side panels are structured to be mounted along
2 the opposite side surfaces of the monitor by way of an
3 adjustable side mount assembly. The adjustable side mount
4 assembly is structured to facilitate mounting of the side panels
5 along the opposite side surfaces of monitors of varying widths,
6 and also provide for forward and backward slided movement of the
7 side panels relative to the mount base. The side panels are
8 structured to selectively extend beyond the front surface of the
9 monitor, thereby effectively shading the screen on the front
10 surface of the monitor from light and side glare, and providing
11 substantial screen privacy.

12 It is an object of the present invention to provide an
13 improved computer monitor utility assembly which increases a
14 user's work or storage space at a computer terminal without
15 sacrificing valuable desktop space.

16 An added object of the present invention is to provide a
17 utility assembly which provides for the efficient and effective
18 integration of a variety of peripheral utility items, such as
19 speakers, microphones and video cameras.

20 An object of the present invention is to provide a monitor
21 utility assembly which is capable of integrating peripheral
22 items in a modular sense so as to achieve a variety of
23 additional benefits, such as screen shading and storage space,
24 while permitting a gradual integration of those additional
25 components.

1 A further object of the present invention is to provide a
2 monitor utility assembly which is structured to effectively
3 store and conceal a variety of peripheral items in a useable and
4 convenient manner.

5 Another object of the present invention is to provide an
6 improved computer monitor utility assembly which minimizes user
7 fatigue, relieves eye stress and strain, and improves monitor
8 screen colors and readability by minimizing the amount of
9 external light striking the surface of the monitor screen and
10 thereby eliminating undue screen glare.

11 It is also an object of the present invention to provide an
12 improved computer monitor utility assembly which allows the user
13 to adjust the assembly so that he/she can increase or decrease
14 the amount of light striking the surface of the monitor screen
15 to a comfortable level.

16 Another object of the present invention is to provide an
17 improved computer monitor utility assembly which provides
18 enhanced privacy to a user dealing with sensitive, restricted,
19 or confidential information.

20 An additional object of the present invention is to provide
21 an improved computer monitor utility assembly which can
22 effectively position a variety of computer utility items in a
23 convenient, useable, and space maximizing orientation.

24 A further object of the present invention is to provide an
25 improved computer monitor utility assembly which provides a user

1 with a convenient and effective sales/informational display by
2 including a display easel or informational literature holding
3 tray with the monitor display.

4 Also an object of the present invention is to provide an
5 improved computer monitor utility assembly which maintains all
6 external, peripheral wires conveniently arranged and organized.
7

8 BRIEF DESCRIPTION OF THE DRAWINGS

9 For a fuller understanding of the nature of the present
10 invention, reference should be had to the following detailed
11 description taken in connection with the accompanying drawings
12 in which:

13 Figure 1 is a perspective view showing the front of the
14 improved computer monitor assembly attached to a standard
15 monitor;

16 Figure 2 is a rear perspective view of the improved
17 computer monitor assembly attached to a standard monitor;

18 Figure 3 is a perspective partial view of the side panel
19 mounting to the universal mount base;

20 Figure 4 is a perspective view showing an alternative
21 embodiment of the L-shaped members;

22 Figure 5 is a perspective view of the display easel;

23 Figure 6 is front view of the improved computer monitor
24 assembly with the display easel in place;

25 Figure 7 is a perspective view of an alternative embodiment

1 of the improved computer monitor assembly including built in
2 speakers;

3 Figure 8 is a perspective view of an alternative embodiment
4 of the computer monitor utility assembly including the
5 integration of the utility console;

6 Figure 9 is a cross section view along line A-A of Fig. 8;

7 Figure 10 is a bottom view of the top panel of the present
8 invention including the preferred utility console;

9 Figure 11 is an isolated rear view of an L-shaped member
10 and side panel of the present invention including a track
11 structure for adjustment purposes;

12 Figure 12 is a front view of another embodiment of the
13 present invention wherein a front surface of the utility console
14 is accessible to the user;

15 Figure 13 is a front view of the present invention
16 illustrating a removable embodiment of the utility compartment
17 disposed on a side panel;

18 Figure 14 is a front view of the present invention
19 illustrating the utility compartment disposed on a side panel
20 including a cover assembly;

21 Figure 15 is an isolated view of the utility compartment
22 including a storage assembly;

23 Figure 16 is an isolated view of the utility compartment
24 including a PDA interface port;

25 Figure 17 is an isolated view of the utility compartment

1 including an alternate peripheral interface port;

2 Figure 18 is an isolated view of the utility compartment
3 including an adjustable panel therein;

4 Figure 19 is an isolated view of the adjustable panel to be
5 disposed in the utility compartment;

6 Figure 20 is a front view of the universal mount bracket
7 including a cantilever bracket;

8 Figure 21 is a side view of the cantilever bracket
9 structure;

10 Figure 22 is a front view of an embodiment of the top panel
11 and utility console;

12 Figure 23 is a rear view of the embodiment of Figure 22;

13 Figure 24 is a top view of the embodiment of Figure 22;

14 Figure 25 is a bottom view of the embodiment of Figure 22;

15 Figure 26 is an isolated bottom view of the top panel
16 structured to accommodate a removable utility console;

17 Figure 27 is a top view of an embodiment of the utility
18 console including a storage compartment;

19 Figure 28 is an isolated side view of the utility
20 compartment of Figure 27;

21 Figure 29 is a rear view of an alternate embodiment of the
22 removable utility console;

23 Figure 30 is an interior view of one embodiment of the
24 utility console;

25 Figure 31 is a side view of the present invention including

1 a secondary support panel;

2 Figure 32 is an isolated side view of the secondary support
3 panel;

4 Figure 33 is a front view of an embodiment of the page
5 holder including an illumination assembly; and

6 Figure 34 is an illustration of an alternate embodiment of
7 the side panels.

8 Like reference numerals refer to like parts throughout the
9 several views of the drawings.

10
11 DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

12 Shown throughout the figures, the present invention is
13 directed towards an improved computer monitor utility assembly,
14 generally indicated as 10. The improved computer monitor
15 utility assembly 10 is structured to be utilized on a computer
16 monitor 15 so as to provide a variety of utility and convenience
17 features in a single, consolidated, multi-purpose assembly that
18 can be adapted and expanded as required by a user. Generally,
19 the computer monitor 15 with which the improved computer monitor
20 utility assembly 10 of the present invention is to be used is of
21 a standard configuration including a front surface 20, on which
22 the screen display 26 is located, a rear surface 21, a pair of
23 opposite side surfaces 22 and 23, a top surface 24 and a bottom
24 surface 25. Furthermore, the standard monitor 15 is usually of
25 the type which can swivel and pivot to provide for convenient

1 orientation of the display screen 26 for the user. As such, the
2 improved computer monitor utility assembly 10 is structured not
3 to hinder or interfere with that screen adjustment by a user.
4 Additionally, it is noted, that especially, but not necessarily
5 when the cantilever bracket 230 of Figures 20 and 21 is used,
6 the present invention may be secured to a thin monitor, such as
7 a flat screen monitor or a monitor that forms part of a laptop
8 or portable computer assembly.

9 Turning to the computer monitor utility assembly 10 itself,
10 it includes a universal mount base 30. The universal mount base
11 30 is structured and disposed to preferably be removably, yet
12 securely attached to the top surface 24 of the monitor 15, in a
13 preferably centrally disposed orientation. Moreover, the
14 universal mount base 30 is preferably secured generally near the
15 front surface 20 of the monitor 15 and is structured to provide
16 the primary secured engagement between the computer monitor
17 utility assembly 10 and the monitor 15. Preferably, the
18 universal mount base 30 is a substantially rigid, elongate
19 member, and is secured to the monitor 15 by way of a
20 substantially high density hook and loop fastener pad 46. The
21 individual portions of the hook and loop fastener pad 46 are
22 correspondingly secured in a substantially strong manner, by an
23 adhesive or equivalently secure fastening structure, to the
24 universal mount base 30 and to the top surface 24 of the monitor
25 15 such that they may be correspondingly secured together with

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1 the high density construction thereof maintaining the
2 substantially secure yet removable connection. Of course, other
3 more integral attachments including screws, clips, direct
4 molding, adhesives and/or brackets may also be used. Also, as in
5 the embodiment of Figures 20 and 21, an additional mounting
6 structure may be provided, such as the illustrated cantilever
7 bracket 230. As indicated, such additional mounting structure
8 is especially beneficial for use with thinner monitors wherein
9 a surface area for engagement is reduced. Preferably one or more
10 of the cantilever mount brackets 230 are provided and may be
11 disposed to extend along the front and/or rear surface of the
12 monitor, so as to prevent tipping of the computer monitor
13 utility assembly 10 under weight. AS such, a front and rear
14 engagement, while not required may be preferred. Furthermore,
15 each of the cantilever brackets 230 preferably includes a
16 contact segment 231 that actually engages the monitor, the
17 contact segment 231 is preferably soft in nature so as to engage
18 the monitor, allow for tightening, such as by adjusting the
19 angle of the cantilever bracket 230, and not damage the monitor.

20 The computer monitor utility assembly 10 of the present
21 invention further includes a top panel 110. The top panel 110
22 is structured to be secured in overlying relation atop the
23 monitor as best shown in figures 1 and 2. In the preferred
24 embodiment, the top panel 110 is generally rigid and has a width
25 generally equivalent to a width of at least the screen 26 of the

1 monitor 15. Of course, this may vary. Furthermore, the top
2 panel 110 is structured such that it may overhang beyond the
3 front surface 20 of the monitor in order to selectively shade
4 the screen 26 on the front surface 20 of the monitor 15 from
5 light and glare.

6 Specifically, the top panel 110 is secured to the universal
7 mount base 30 in overlying relation atop the monitor 15 by way
8 of an upper mount assembly 40. The upper mount assembly 40,
9 which may be incorporated with the universal mount base and
10 therefore can be secured directly to the monitor 15 is
11 structured to preferably provide pivotal as well as forward and
12 backward sliding movement of the top panel 110 relative to the
13 monitor 15. As such, the top panel 110 can be variably
14 positioned in a desired shading orientation by the user.
15 Indeed, by overhanging the top panel 110 substantially beyond
16 the front surface of the monitor 15, direct overhead lighting
17 can be substantially blocked, and a clearer, less eye straining
18 image can be viewed. This is dramatically unlike conventional
19 vertical shades that attempt to provide textured or other
20 material configurations which if they reduce the glare can often
21 reduce the quality and/or crispness of the image to the user.
22 Of course, it is noted that some radiation screens can be
23 effective for alternative purposes, and the present invention
24 permits such devices to be utilized while also reducing the
25 glare that may result from light reflection off of the screen

1 shield itself.

2 In addition to achieve an effective degree of shading to
3 the screen 26 of the monitor 15, the top panel 110 also address
4 the important need to maximize the available space at a work
5 area. In particular, the upper mount assembly 40 is structured
6 to securely retain the top panel in an orientation and with
7 sufficient strength such that a number of articles, such as
8 papers and the like can be supportably retained on the top panel
9 110. This secure retention of the documents is also done at a
10 generally elevated position above the screen 26 of the monitor
11 15 such that documents or other articles disposed thereon do not
12 interfere with the viewing of the screen 26. Additionally, the
13 top panel 110 preferably includes a lip 112 extending along a
14 front edge 111 thereof. The lip 112 functions to substantially
15 retain the notebooks, letters, documents, fliers, or similar
16 materials which are placed on the top panel 110 in a convenient,
17 out of the way, space maximizing, accessible location. Indeed,
18 this lip 112 is especially beneficial because of the general
19 desirability to maintain the top panel 110 in preferably a
20 downwardly sloped orientation towards the front edge 111, as
21 best shown in figure 1, thereby maximizing the shading to be
22 achieved thereby. Also, this downwardly sloped orientation also
23 facilitates access and/or viewing of the articles on the top
24 platform 110 by the user, without substantial risk of those
25 documents obscuring the user's view and/or sliding off onto the

1 user. The top panel 110 may also include raised lips on its
2 side edges, as shown in figures 1 and 2, so that items placed on
3 the top panel 110 cannot slide off the sides.

4 As yet another alternative, and looking to Figures 25, 31
5 and 32, a secondary support panel 282 may also be provided. The
6 secondary support panel 282 is structured to be secured to the
7 top panel 110 so as to provide additional storage area and
8 define a two tiered configuration. Although the secondary
9 support panel 282 may be fixedly and/or integrally formed with
10 the top panel 110, in the illustrated embodiment the secondary
11 support panel 282 is removably secured, such as by a track
12 assembly 280. In particular, the track assembly 280 includes
13 cooperating structure on the secondary support panel 282 and the
14 top panel 110, such as on its underside. Accordingly, the
15 secondary support panel 282 may be slid in place and provided as
16 an add on if additional storage area is required. It is
17 understood that alternate mounting structure may be provided,
18 and the dimension as well as the number of tiers and
19 compartments provided by the secondary support panel 282 may
20 vary as needed.

21 As indicated, the upper mount assembly preferably secures
22 the top panel 110 in a generally elevated or spaced apart
23 relation above the monitor 15. As a result, a preferred
24 embodiment of the present invention, as illustrated in Figures
25 8-10, 12-14 and 22-30, incorporate a utility console 150. The

1 utility console 150 is structured to at least partially contain
2 a plurality of peripheral components often used with computer
3 systems. For example, in the preferred embodiment, the utility
4 console 150 integrates and/or at least partially contains a
5 speaker assembly, a microphone 60 and/or a computer video camera
6 70. As illustrated, the utility console 150 is preferably a
7 contained housing that is secured to an underside of the top
8 panel 110, such as by a series of tracks 151 into which the
9 utility console may slide for appropriate positioning. Although
10 a fixed mounting of the utility console is contemplated, the
11 illustrated removable securement of the utility console 150 is
12 preferred so as to achieve a modular type of assembly wherein
13 one or more peripheral items can be added at a time, thereby
14 allowing for future expansion as needed, while still maintaining
15 an organized and contained structure.

16 In the preferred embodiment of the utility console 150, the
17 speaker assembly includes a pair of speakers 123" that are
18 audibly disposed in relation to the monitor 15 by the utility
19 console 150. Preferably, the speakers 123" are mounted within
20 the utility console itself so as to be well contained and
21 compact. As a result, if removal or addition of speakers is
22 required, such as during expansion, repair or replacement, the
23 utility console can be removed and the speakers can be easily
24 accessed at once. Moreover, such a configuration allows for a
25 complete upgrade of peripheral items by removing the entire

1 utility console and replacing it with a new one having upgraded
2 or additional peripheral items. As illustrated in Figure 10,
3 the speakers 123" are preferably concealed within the utility
4 console 150, but are preferably audible through a pair of
5 screens 125 disposed in a bottom surface of the utility console
6 150, preferably near a front end thereof. As a result, and
7 because the upper mount assembly maintains the top panel 110 to
8 which the utility console 150 is secured generally elevated
9 above the monitor 15, the screens 125, and possibly one or more
10 internal baffles, direct the audio signal towards the screen 26
11 and front of the monitor for focused listening by the user.
12 Indeed, because the top panel 110 is structured to overhang the
13 monitor 15 so as to shade the screen 26, the screens 125 through
14 which the speakers are primarily heard are focused onto the work
15 area and are quite effective. Of course, auxiliary speakers can
16 be easily connected to the primary speaker assembly, such as
17 through one or more auxiliary ports, and/or other speaker
18 assemblies as will be described subsequently can be integrated
19 into the system, especially those systems which include more
20 than the top panel 110 as a primary component.

21 As indicated, the utility console 150 also preferably
22 accommodates a microphone 60. Increasingly, more and more
23 applications require some form of audio input, and the advent of
24 advanced computer telephony has made microphones a necessity in
25 many operating systems. The utility console 150 of the present

1 invention includes the microphone 60, either internally, or
2 externally mounted, such as by a plurality of brackets 61.
3 Moreover, the microphone 60 is preferably mounted in such a
4 manner that it may be extended or retracted as needed by the
5 user. Specifically, it is understood that the microphone may
6 not be required in many circumstances. As a result, when not in
7 use the microphone may present an obstacle or inconvenience to
8 the normal use of the computer. The system of the present
9 invention is structured such that when not in use, the
10 microphone 60 can be retracted beneath the top panel 110 and
11 thereby positioned out of the way. Alternatively, when use of
12 the microphone 60 is required, and its retracted position does
13 not provide sufficient proximity to pick up the necessary input,
14 the microphone 60 can be pulled outward so as to extend from the
15 front of the top panel 110 and be more effectively positioned
16 relative to the user. Of course, the microphone 60 could also
17 be adjustable so as to be angled downward or more towards the
18 user with a variety of bendable or adjustable designs.

19 As yet another embodiment, a transceiver 242, such as for
20 wired or wireless communication with a headset 243 may be
21 provided. As such, the headset includes a microphone and speaker
22 as part thereof. Furthermore, one or more USB ports 250 that
23 are preferably externally accessible by the user and are in
24 communicative association with a corresponding USB processor of
25 the computer, may also be provided. Accordingly, easier

1 accommodation and connection of certain peripheral devices may
2 be achieved. Of course, internal connectivity to the USB port
3 may also be provided, as may be beneficial with certain alternate
4 embodiments as will be described in connection with the side
5 panels.

6 Looking to Figures 27 and 28, as yet another alternative,
7 the removable utility console 150' may include instead of or in
8 addition to the various electronic components, a storage
9 compartment 236. The storage compartment 236 may be open and
10 concealed by the top panel 110, or may include a lid as in the
11 figures.

12 As indicated, the top panel 110 preferably includes a lip
13 112 along its front edge to retain articles disposed on the top
14 panel 110. In a preferred embodiment, as illustrated in figures
15 8-10, the lip 112' at preferably the front edge of the top panel
16 110 may be structured to extend beneath the top panel 110. It
17 is noted that while the preferred embodiment includes the lip
18 112' of unitary construction both above and below the top panel
19 110, it is understood that separate construction with an upper
20 and a lower portion of the lip is also contemplated. Returning
21 to the preferred embodiment, the lip 112' extends beneath the
22 top panel 110 and is preferably disposed so as to confront and
23 generally conceal the utility console 150 from direct view,
24 indeed defining a front surface thereof. In particular, the
25 preferred embodiment of the utility assembly incorporates a

1 slided introduction of the utility console 150 with the top
2 panel 110. In such an embodiment, the utility console slides
3 into abutting engagement with the portion of the lip 112' that
4 extends beneath the top panel 110. As a result, the utility
5 console 150 is effectively contained, and a more uniform
6 appearance is achieved. Furthermore, the lip 112' preferably
7 includes a series of apertures which function to permit the
8 exterior actuation of the peripheral items, such as the speaker
9 assembly, microphone, etc. For example, the lip 112' is
10 preferably configured such that a portion, such as an exteriorly
11 actuatable switch assembly 126, of the speaker assembly
12 protrudes therethrough. Preferably the switch assembly 126
13 includes an on/off and/or volume control switch. Of course, a
14 series of other plugs, such as a headphone jack 128 or auxiliary
15 speaker/input jacks can also be incorporated and accessible
16 through the lip 112'. Additionally, in the preferred embodiment
17 wherein the retractable microphone 60 is integrated, the lip
18 112' preferably includes an aperture through which the
19 microphone 60 extends as needed, or into which a stationary
20 microphone can be built. This is a similar case with a computer
21 video camera 70 which preferably extends from the utility
22 console 150 and projects through the lip 112' into viewing of
23 the user utilizing the computer. Of course, it is noted that
24 other utility items, such as a power switch and the like
25 associated with the utility console can also be structured to

1 protrude through the lip 112'. Furthermore, the precise
2 positioning of each peripheral item along the lip 112' can be
3 varied. For example, it may be desirable to center the video
4 camera 70. Also, because of the preferred modular structure of
5 the utility console 150 the apertures through which the various
6 items protrude through the lip 112' can be pre-formed, with a
7 series of caps, plates or other covers being disposed in
8 covering relation thereon until use of that opening or port is
9 desired. Similarly, one or more ports or outlets can be
10 provided at a rear or side of the utility console, as needed to
11 support or add peripheral items. Along these lines, the utility
12 console 150 preferably includes a single cable outlet through
13 which all of the cable as connections of the peripheral items
14 can extend into connection with the CPU and a power source. As
15 illustrated a cable sleeve 90 is preferably provided so as to
16 prevent entanglement of the various wires. Also, although a
17 central power terminal is preferably provided in the utility
18 console 50 for all of the peripheral items, the power connection
19 to a conventional power source or the CPU preferably also
20 extends within the cable sleeve 90. Alternately, if a front
21 mounting of the utility console 150 is desired, the front
22 surface of the utility console as defined by the lip may be
23 integral with the utility console, thereby defining the
24 aforementioned bottom portion of the lip. Also, it is noted that
25 the top panel need not be provided in all embodiments such that

1 the upper portion of the lip is not required.

2 Looking further to a preferred embodiment of the upper
3 mount assembly 40, it preferably includes a pair of bracket
4 members 41 extending upwardly from the universal mount base 30
5 in generally spaced apart relation from one another, as shown in
6 figure 3. Further, the bracket members 41 each preferably
7 include an aperture 43 formed therein. Disposed in generally
8 adjacent, abutting engagement with the bracket members 41, and
9 included as part of the upper mount assembly 40, are a pair of
10 flanges 42. The flanges 42 are disposed in generally spaced
11 apart relation from one another, preferably to substantially
12 correspond the spacing between the bracket members 41, and are
13 secured to and extend downwardly from the top panel 110.
14 Moreover, each flange 42 preferably includes an elongate slot 44
15 defined therein. The bracket members 41 and flanges 42 are
16 disposed relative to one another such that at least one, but
17 preferably a pair of fastener elements 45 can extend through
18 each of the apertures 43 in the bracket members 41 and through
19 each corresponding slot 44 of the flanges 42. As such, the
20 flange 42 is able to pivot and slide relative to the bracket
21 members 41, and the top panel 110 correspondingly slides and
22 pivots relative to the mount base 30 so that its position can be
23 adjusted. Further, tightening or loosening of the fastener
24 elements 45, such as through the use of bolts and nuts, can
25 effectively secure the top panel in a desired position until

1 adjustment is needed. With regard to the upper mount assembly
2 40, it is noted that the bracket members may be configured with
3 elongate slots in addition to or instead of the elongate slots
4 being disposed on the flanges alone.

5 A preferred embodiment of the improved computer monitor
6 utility assembly 10 of the present invention further includes a
7 pair of generally rigid side panels 120. The side panels 120
8 are structured and disposed to extend along the opposite side
9 surfaces 22 and 23 of the monitor 15, and to selectively extend
10 beyond the front surface 20 of the monitor 15. Accordingly, the
11 side panels 120 substantially shade the monitor screen 26 from
12 light and side glare, and provide a user with screen privacy. In
13 particular, by reducing the amount of light striking the monitor
14 screen 26, the fatigue and strain upon a user's eyes is reduced
15 due to the improvement in the colors and readability of the
16 monitor screen 26. Furthermore, by effectively shading the
17 monitor from screen glare a user can reduce the monitor
18 brightness and contrast level settings. Along with
19 significantly reducing the strain on a user's eyes, lowering the
20 intensity of the monitor screen's brightness and contrast levels
21 also helps protect the monitor from image burn-in, the most
22 common form of display damage.

23 The side panels 120 are secured along the opposite side
24 surfaces 22 and 23 of the monitor preferably by way of an
25 adjustable side mount assembly 50. The adjustable side mount

1 assembly 50 is structured to provide forward and backward slided
2 movement of the side panels 120 relative to the mount base 30.
3 Accordingly, a user is able to adjust the side panels 120 to
4 either increase or limit the amount of light striking the
5 monitor screen 26. Moreover, if only a single side of the
6 monitor's location results in the glare or requires privacy,
7 each of the side panels 120 can be independently positioned to
8 provide more or less shading.

9 The adjustable side mount assembly 50 preferably includes
10 a pair of generally L-shaped members 51. The L-shaped members
11 51 are structured to variably extend from opposite ends of the
12 mount base 30 and include both a horizontal leg 52 and a
13 downwardly depending vertical leg 53. The horizontal leg 52 is
14 structured to be adjustably secured to the universal mount base
15 30, and as such, a length thereof permits appropriate,
16 adjustable positioning of the side panels 120 along the sides of
17 monitors of varying sizes. As to the downwardly depending
18 vertical leg 53 of each L-shaped member 51, it extends
19 downwardly along a corresponding side surface 22 or 23 of the
20 monitor 15 and is secured to a corresponding side panel 120.

21 In a first preferred embodiment, each of the vertical legs
22 53 of the L-shaped members 51 includes a bore 54 formed therein,
23 and each of the side panels 120 includes a slot 55 formed
24 therein. As such, the side panels are disposed in abutting
25 relation with the vertical legs 53 of the L-shaped members 51

1 such that each of the slots 55 overlies a corresponding one of
2 the bores 54 for receipt of a fastener element 56 therethrough.
3 As such, relative slided movement of the side panels 120 is
4 achieved. It should be noted that the slot may be equivalently
5 be disposed in the vertical legs either in addition to or in
6 place of the slot in the side panels. Further, any alternative
7 configurations, such as a mating track and ridge or alternative
8 sliding guide member may be equivalently implemented so long as
9 it provides for slided movement of the side panels 120 relative
10 to the monitor 15. For example, as best seen in figures 8 and
11 11, a track structure may be provided on the vertical legs 53 of
12 the L-shaped members 51 and on the interior of the side panels
13 120. In the preferred embodiment, a pair of outwardly
14 protruding track elements 55' mate with a pair of inwardly
15 protruding track elements 56', thereby maintaining alignment and
16 retention of the side panels 120 upon slided movement thereof.

17 As previously recited, the horizontal leg 52 of each of the
18 L-shaped members 51 is preferably structured to be adjustably
19 secured to the universal mount base 30. Accordingly, in the
20 preferred embodiment, the universal mount base 30 includes a
21 generally tubular member 47 structured and disposed to receive
22 the horizontal leg 52 of each of the L-shaped members 51 into
23 opposite sides thereof. In a preferred embodiment, the
24 adjustable side mount assembly 50 includes an elongate slot 57
25 formed in the horizontal leg 52 of each of the L-shaped members

1 51. A fastener element 31 extends from the universal mount base
2 30 through each of the elongate slots 57 in the horizontal legs
3 52, thereby providing for variable spacing of the vertical legs
4 53 of the L-shaped members 51 relative to the universal mount
5 base 30. Similarly, in an alternative embodiment, the
6 horizontal legs 52 of the L-shaped members 51 may include a
7 plurality of spaced openings 59 rather than a single elongate
8 slot 57. The spaced openings 59 will be structured to
9 selectively receive an adjustable positioning element 31 secured
10 to the universal mount base 30. Still, however, it is seen that
11 mere frictional engagement between the horizontal legs 52 of the
12 L-shaped members 51 and the universal mount base 30 may also
13 achieve secured, adjustable interconnection.

14 Looking to Figure 34, in yet another embodiment of the side
15 panel 290, a main segment 291 of the side panel 290 may be non-
16 movably, yet possibly removably, secured to the universal mount
17 base. To provide a varied degree of shading, an extension
18 segment 292 is adjustable secured to the main segment 291.
19 Although a varied number of adjustable interconnections may be
20 defined, in the illustrated embodiment, a track structure 293
21 may be provided.

22 Further included with the improved computer monitor utility
23 assembly 10 in a preferred embodiment is at least one adjustably
24 positionable page holder assembly 130. The page holder assembly
25 130 is configured to increase desktop space and reduce neck

1 stress and fatigue by suspending documents at eye level for
2 viewing or data-entry purposes. The page holder assembly 130
3 preferably adjusts to different angles and heights to allow the
4 user to view a document in the best lighting and glare-reducing
5 perspective and maximum user comfort, and may fully retract
6 along a side of the monitor when not in use. Moreover, the page
7 holder assembly 130 is structured to extend the page forward
8 such that a document is visible despite the extended positioning
9 of the side panels 120 in a shading orientation.

10 The page holder assembly 130 includes primarily a holder
11 panel 131. The holder panel 131 is structured and disposed to
12 be movable between a retracted and operative position. In the
13 retracted position, the holder panel 131 extends along the side
14 surface 22 or 23 of the monitor 15. In the operative position,
15 however, the holder panel 131 is suspended generally adjacent
16 the front surface 20 of the monitor so that a document disposed
17 on the holder panel 131 is easily viewable by a user viewing the
18 front surface 20 of the computer monitor as best shown in figure
19 1. In the preferred embodiment, the page holder assembly 130
20 also includes an elongate, rigid, generally L-shaped support rod
21 132. The support rod 132 is pivotally secured preferably to the
22 horizontal leg 52 of an L-shaped member 51 or directly to the
23 universal mount base and is adjustably secured to the holder
24 panel 131 so that the holder panel 131 is adjustably suspended
25 in an operative position. Alternatively, when not in use, the

1 support rod 132 permits the holder panel 131 to completely
2 swivel out of the way into a retracted position flush against
3 the computer monitor. Moreover, the holder panel 131 includes a
4 support assembly 133 structured and disposed to support an
5 article such as loose documents or a legal pad visibly on the
6 holder panel 131. The support assembly 133 may include a
7 clipboard type of clamp located at the top or bottom or even
8 both ends of the holder panel 131, or alternatively as a lip at
9 a lower edge of the holder panel 131.

10 Additionally, as in Figure 33, an illumination assembly 270
11 may be provided so as to illuminate an article on the page
12 holder assembly 130. The illumination assembly 270 may include
13 a small lamp, which it is recognized, may be secured at any part
14 of the present computer monitor utility assembly 10.

15 In an alternative embodiment, the top panel 110 of the
16 improved computer monitor utility assembly 10 is structured and
17 disposed so that it can securely support a display easel 140 to
18 facilitate the visible presentation of various display articles
19 over the monitor 15. In particular, the display easel 140
20 preferably includes a pair of hinged panels 141 and 142 which
21 are hingedly secured to one another along their respective top
22 edges. At least one of the hinged panels 141 and 142 includes
23 a lower edge cutout 143 which is structured and disposed to
24 facilitate the secured engagement of the front panel 142 with
25 the lip 112 on the front edge 111 of the top panel 110, and may

1 even be structured to permit informational papers to be
2 accessibly contained thereunder. In the preferred embodiment,
3 the display easel 140 is at least partially translucent and
4 includes back lighting means 144 structured and disposed to back
5 light any display articles disposed on the easel 140.

6 The computer monitor utility assembly 10 may also be
7 configured so as to be fully adaptable and accommodating to the
8 various computer peripherals offered in the industry in a
9 variety of alternative manners. Consistent with the theme to
10 increase functional workplace, the improved computer monitor
11 assembly 10 is designed to support various computer cables and
12 peripherals in a manner which frees usable desk space and
13 reduces overall clutter. As such, the improved computer monitor
14 utility assembly 10 may include a computer microphone 60
15 adjustably and operatively secured preferably to one of the side
16 panels 120. Although a smaller microphone may be included for
17 mounting to any portion of the assembly, in the preferred
18 embodiment an elongate, swivelable microphone will be included
19 such that it may extend from the side panel 120 towards the user
20 when necessary. Moreover, an alternative embodiment of the
21 improved computer monitor utility assembly 10 may also include
22 a computer video camera 70 adjustably mounted in a similar
23 manner to one of the side panels 120 or beneath the top panel
24 110 so as to effectively capture a person utilizing the
25 computer.

1 Further, the improved computer monitor utility assembly 10
2 may include a speaker mount assembly 121 on each of the side
3 panels 120. The speaker mount assembly 121 is structured and
4 disposed to provide for the removable mounting of external
5 computer speakers 123 onto the side panels 120. In this
6 embodiment, the speaker mount assembly 121 will be secured by
7 way of a high density hook and loop fastener pad 122 matingly
8 disposed on each of the external computer speakers 123 and each
9 of the side panels 120. It is understood, however, that a mount
10 bracket may also be included as a speaker mount assembly 121,
11 and in fact the speakers 123 may be integrally mounted with the
12 side panels 120.

13 Furthermore, in another alternative embodiment, the
14 computer speakers 123' may be integrally molded into the side
15 panels 120, as illustrated in figure 7. Such a configuration
16 permits a narrower, more finished profile to be achieved and
17 facilitates internal wiring and greater stability. Similarly,
18 a plurality of plugs or jacks for facilitated connection to
19 various types of external component plugs, or switches and
20 controls, such as a volume control may also be molded or
21 otherwise secured to one or both of the side panels 120. In
22 this regard, one switch preferably includes an audio mode
23 selection switch 127. The audio mode selection switch 127 is
24 structured to permit a user to select between normal audio and
25 "personal sound" audio. Specifically, in some instances, the

1 normal volume of external speakers may be too great, and too
2 difficult for the computer user to hear if kept too low, and/or
3 privacy may sometimes be desired with regard to the audio being
4 heard. As such, as a further embodiment of the present
5 invention, a pair of interior, focused speakers 123" may be
6 included and disposed on an interior surface of one or both side
7 panels 120. Accordingly, when both side panels are disposed so
8 as to shield the monitor screen, a low level audio can be
9 focused directly at the user. Subsequently, merely by actuating
10 the audio mode selection switch 127 normal audio can be re-
11 established.

12 As can be appreciated, in any multi-media computer set up,
13 a number of peripheral cables are included and directed towards
14 the CPU. In order to conveniently direct and store those
15 various peripheral cables utilized, in a preferred embodiment,
16 the side panels 120 preferably include at least one aperture 124
17 formed therein which is structured to receive any peripheral or
18 utility cable 80 extending from a utility item disposed on the
19 side panel 120. As such, the aperture facilitates the
20 concealed, organized passage of any utility cables along the L-
21 shaped members 51 to the universal mount base 30, such as by
22 clips and the like. Also, in the preferred embodiment, a cable
23 sleeve 90 extends from the mount base 30 and is structured to
24 receive all of the utility cables 80 and provide organized
25 passage of the utility cables 80 towards the rear surface 21 of

1 the monitor. Furthermore, a transformer 100 may be secured to
2 the mount base 30 so as to receive corresponding utility cables
3 80 therein and direct a single power cable to the power supply.

4 Looking to Figures 13-19, if desired, one or more utility
5 compartments 210 may be secured to one or both side segment 120.
6 The utility compartment 210 may be integrally secured and or
7 completely removable relative to the side panel 120. Further, in
8 the illustrated embodiment, a cover assembly 212 may be provided
9 so as to at least temporarily conceal an interior 214 of the
10 utility compartment 210. The cover assembly 212 may be hingedly
11 secured to the side panel 120, as illustrated, so as to allow
12 for opening and closing, or it may be completely removably, such
13 as using pins, clips, clamps, magnets, etc. Moreover, the cover
14 assembly 212 itself may define and contain the interior 214 as
15 an independent structure or with cooperating structure on the
16 side panel. Further, as illustrated, a lock assembly 216 may be
17 provided so as to secure the utility compartment 210 and
18 maintain articles disposed therein.

19 Looking to Figure 15, a storage assembly 218 may be defined
20 in the utility compartment 2210. The storage assembly 218 may be
21 fixed or removable and may be provide in a variety of
22 configurations depending upon the needs of the user. Also, the
23 storage assembly 218 may be secured to the side panel 120 or to
24 the cover assembly 212. As in figures 18 and 19, however, if
25 even further storage and/or functionality is required, one or

1 more adjustable panels 224 may be disposed in the utility
2 compartment 210. These adjustable panels 224 may be hingedly
3 secured in place so as to allow selective access to the
4 components on each one. Moreover, a peg board or other
5 adjustable structure may be provided so as to allow for
6 variability in the positioning and orientation of the one or
7 more storage assemblies 218 or other components. With regard to
8 alternate components that may be provided in the utility
9 compartment 210 with or without the storage assembly 218, a
10 peripheral interface port 220, 220' may be provided. The
11 peripheral interface port 220, 220' is preferably
12 communicatively associated with the computer processor assembly,
13 such as directly or via a USB or other port in the utility
14 console 150, thereby providing convenient functionality at the
15 side panel(s) 120. Looking to Figure 16, the peripheral
16 interface port includes a PDA interface port 220, such as a
17 docking and/or re-charging cradle. As such, a standard PDA
18 (personal digital assistant) may be effectively interfaced and
19 maintained in a conveniently accessible location. As in the
20 embodiment of Figure 17, the peripheral interface may relate to
21 any of a variety of peripherals, including a cellular telephone
22 221', computer pointer, tape drive, etc.

23 Since many modifications, variations and changes in detail
24 can be made to the described preferred embodiment of the
25 invention, it is intended that all matters in the foregoing

1 description and shown in the accompanying drawings be
2 interpreted as illustrative and not in a limiting sense. Thus,
3 the scope of the invention should be determined by the appended
4 claims and their legal equivalents.

5 Now that the invention has been described,
6